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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/735,670	12/16/2003	Gakushi Aota	8071-1001	2825

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EXAMINER

ISSAC, ROY P

ART UNIT	PAPER NUMBER
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1623

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/25/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/735,670

Applicant(s)

AOTA, GAKUSHI

Examiner

Roy P. Issac

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Status of the Application

This application, filed 16 December 2003, does not claim priority to any foreign or domestic applications.

This Office Action is in response to Applicant's response (remarks/Argument/Amendment to the claims) filed 26 October 2006. No claim is amended. New claims 16 and 17 are added. Claims 1-17 are currently pending and are examined on the merits.

Rejections Withdrawn

Applicant's arguments, see page 7, filed 26 October 2006, with respect to rejection under 35 U.S.C § 112, second paragraph have been fully considered and are persuasive. The rejection of claims 9-12 with respect to the phrase "thickener" has been withdrawn.

The following are new or modified rejections necessitated by Applicant's amendment filed 26 October 2006, wherein new claims 16 and 17 were added. Therefore, all rejections from the previous Office Action, filed 26 July 2006, have been modified and are listed below.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 16-17 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claim 16 is related to cosmetic composition comprising "at least 90 vol% of pigment particles with a dispersed diameter of at most 0.7 μm ; at least 60% water; and a viscosity of not more than 5 cps." Applicant's amendment with respect to new claims herein has been fully considered, but is deemed to insert new matter into the claims since the specification as originally filed does not provide support for applicants' claim a composition comprising "at least 90 vol% of pigment particles with a dispersed diameter of at most 0.7 μm ; at least 60% water; and a viscosity of not more than 5 cps." Claim 17 relates to a process for producing a composition according to claim 16 with a polymer emulsion and a thickener.

The specification notes that, "The viscosity of the pigment dispersion of the present invention is not limited, but the pigment dispersion of the present invention may have a very low viscosity, for instance, not more than 5 cps, or even not more than 2 cps, or even not more than 1 cps." (Page 12, Paragraph 3). "The dispersion medium that can be used in the present invention is not particularly limited." (Page 5, lines 23-25). Applicants further note that, "A dispersion of the present invention has a very high stability of the dispersed state, therefore, it can contain even more than 60 wt % or more than 70 wt % of water." (Page 6, lines 1-4). None of the examples show a composition with 60 wt% of water. None of the examples show a viscosity measurement of not more

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than 5 cps. Furthermore, none of the examples show a composition with 60 wt% water and a viscosity measurement of not more than 5 cps. Furthermore, none of the examples show a composition wherein there is 60 wt% water and a viscosity measurement of not more than 5 cps and a thickener is present.

The description as originally filed does not provide support for the composition with water and particle dispersion as instantly claimed. The specification does not describe any other compositions comprising both, a dye dispersion, viscosity and water in the specific range, as claimed. The court held that "subgenus range was not supported by generic disclosure and specific example within the subgenus range"; See e.g. *In re Lukach*, 442 F.2d 967, 169 USPQ 795 (CCPA 1971); the court also held that "a subgenus is not necessarily described by a genus encompassing it and a species upon which it reads" (see *In re Smith*, 458 F.2d 1389, 1395, 173 USPQ 679, 683 (CCPA 1972). See also MPEP 2163. Consequently, there is nothing within the instant specification which would lead the artisan in the field to believe that Applicant was in possession of the invention as it is now claimed. See *Vas-Cath Inc. v. Mahurkar*, 19 USPQ 2d 1111, CAFC 1991, see also *In re Winkhaus*, 188 USPQ 129, CCPA 1975.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 13, the only independent claims in the application refers to "at most 0.7 μm " as the dispersed particle size. The lack of a lower limit renders the claim indefinite.

Claims 1-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claims 1 and 13, the only independent claims in the application, refers to "at least 90vol%" as portion of the pigment that has dispersed particles of specified diameter. The lack of an upper limit renders the claim indefinite.

Response to Arguments

Applicant's arguments filed 26 October, 2006 with respect to this rejection of claims 1-15 made under 35 U.S.C. §112 second paragraph, of record in the previous Office Action have been fully considered but they are not deemed persuasive to render the claimed invention patentable over the prior art as further discussed below.

Applicants argue that the terms "at most" and "at least" do not render the claims indefinite. The applicants further argue that one skilled in the art would have understood the term "at least 90 vol%" to include an upper limit of 100vol% and the term "at most 0.7 μm " to include particle diameter greater than 0 up to and including 0.7 μm . The applicants argue that one of skill in the art will view the limitation "at least 90 vol%" to mean the upper limit to be 100 vol%. However, there is no indication in the

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specification that the applicants scope of the claims will include the limitation 100 vol%. The specification does not indicate any methods that will produce such a dispersion in which 100 vol% will have such a particle size. As such, one of skill in the art will not view the claims in light of the specification to include the limitation 100 vol%. In case of the limitation "at most 0.7 μ m", the instant claims will include the size 0, which is an impossible limitation. There is no indication in the specification to show which size above zero is covered by the instant claims. As such, one of skill in the art will not be able to determine the scope of the claim coverage from the limitation "at most 0.7 μ m."

Claims 5-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "cosmetic ingredient" is not clearly defined in the specification. There are a multitude of additives that can be considered as a "cosmetic ingredient." The specification provides no guidelines as to which of these additives are excluded. Hence, one of ordinary skill in the art could not ascertain and interpret the metes and bounds of the patent protection desired as to the claimed process encompassed by the recited phrase herein.

Response to Arguments

Applicant's arguments filed 26 October, 2006 with respect to this rejection of claims 5-15 made under 35 U.S.C. §112 second paragraph, of record in the previous

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Office Action have been fully considered but they are not deemed persuasive to render the claimed invention patentable over the prior art as further discussed below.

Applicants assert that cosmetic ingredients are mentioned in the specification. However, the listing of examples does not clearly define the scope of the phrase "cosmetic ingredient". A description in terms of examples is excluded is not considered a clear definition. Any significant structural variation to a compound or ingredient would be reasonably expected to alter its properties; e.g., physical, chemical, physiological effects and functions. Thus, it is unclear and indefinite as to the scope of the phrase "cosmetic ingredient" herein encompassed thereby.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless,—

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2, 5-6, 9-10, 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ser et. al. (U.S. Patent No. 5,580,546; Of Record).

Ser et. al. discloses a cosmetic composition containing a pigment as a solid dispersion of polyhydric alcohol for cosmetic use. (Abstract). The dispersion has an average particle size between 0.03 μm and 0.5 μm . (Column 6, lines 1-17, Example 3). This reported particle size is within the range specified in claim. Even though the '546

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patent does not specify that at least 90% of the pigment dispersion has a dispersion diameter of less than 0.7 μm , the reported average particle diameter of 0.03-0.5 μm is well below 0.7 μm of the instant application. As such, one of ordinary skill in the art will expect that the dispersion disclosed in Ser et. al. has at least 90% of the pigment has a dispersion diameter less than 0.7 μm . Ser et. al. further discloses the use of a polymer (polyethylene) and other ingredients that can be considered as thickeners, for example, Carnauba wax. (Column 6, lines 1-17, Example 3). Various types of surfactants can be used as dispersants. (Specification, Page 6, lines 5-10). Ser et. al. discloses the use of hydrocarbon surfactants to achieve finer dispersion. (Column 2, lines 25-32). Ser et. al. further discloses the use of polyethylenes as surfactants for dispersion. (Column 2, lines 38-42). Ser et. al. further discloses the use of dispersion pigments. (Column 5, lines 50-55). Ser et. al. further discloses the use of polymer, in particular, polyethoxylated compounds, for the formation of emulsion. (Column 1, lines 25-29).

Response to Arguments

Applicant's arguments filed 26 October 2006 with respect to this rejection of claims 1-2, 5-6, 9-10, 13 and 14 made under 35 U.S.C 102(b) of record in the previous Office Action have been fully considered but they are not deemed persuasive to render the claimed invention patentable over the prior art as further discussed below.

The applicant argues that it is not clear what the expression in Ser et. al. , "average size of the particles is between 0.03 and 0.5 μm " represents. Applicant further suggests that it is not clear if the average range refers to a single composition

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measured a plurality of time or if this is an average of multiple compositions. Further, the applicants suggest that it is unclear which particles were measured. As noted in the previous office action, "Ser et. al. discloses a cosmetic composition containing a pigment as a solid dispersion of polyhydric alcohol for cosmetic use. (Abstract). The dispersion has an average particle size between 0.03 μm and 0.5 μm . (Column 6, lines 1-17, Example 3)." Applicants further argue that, "as these two types of pigment particle diameters are completely different and Ser does not disclose which type is used, Ser does not disclose pigment particle sizes of a dispersion with any specificity." Even though these two might be different measurements, there is no reason to think that the particle size of Ser et. al. do not fall into the claimed range herein. The prior art products appear to have identical or substantially identical properties. Since the Office does not have the facilities for preparing the claimed materials and comparing them with prior art inventions, the burden is on Applicant to show a novel or unobvious difference between the claimed product and the product of the prior art. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

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Claims 1-17 are further rejected under 35 U.S.C. 102(b) as being anticipated by Hall-Goulle et. al. U.S. Patent No. 6,001,168; Of Record).

Hall-Goulle et. al. claims a pigment dispersion comprising a polymer and a pigment compound in a water free or water-containing solvent with an average particle size of less than 0.5 μm . (Column 12-13, Claim 1; Column 3, lines 32-45). The pigment is disclosed as useful in cosmetic compositions. (Column 1, lines 25-30). Water is considered a cosmetic ingredient. The reported particle size of 0.5 μm is well below the 0.7 μm recited in claims 1 and 13. Various types of surfactants can be used as dispersants, including water-soluble polymers. (Specification, Page 6, lines 5-10). Hall-Goulle describes the use of polymers in water-containing pigment dispersions that has hydrophilic regions. Hall-Goulle further discloses the use of surfactants in the pigment dispersion. (Column 5, lines 10-27). Hall-Goulle further discloses the use of the pigment dispersion as a coloring agent. (Column 7, lines 27-33). The recitation of viscosity as a limitation is considered a functional description of the composition. The composition of Hall-Goulle does not report a viscosity measurement. However, there is nothing in the applicants' specification or Hall-Goulle et. al. showing that the viscosity of the compositions of Hall-Goulle is different from that claimed herein. Hall-Goulle further discloses the use of mixtures of water and water-free organic solvents. Emulsions are mixtures of solvents that do not dissolve in each other. One of ordinary skill in the art will know that mixtures of organic solvents and water will form emulsions.

Thus, claims 1-17 are anticipated by Hall-Goulle et. al.

Response to Arguments

Applicant's arguments filed 26 October 2006 with respect to this rejection of claims 1-15 made under 35 U.S.C 102(b) of record in the previous Office Action have been fully considered but they are not deemed persuasive to render the claimed invention patentable over the prior art as further discussed below.

Applicant asserts that the applicants could not find the "average particle size of less than 0.5 μm " in Hall-Goulle et. al. Following is Claim 1 of Hall-Goulle et. al.;

"A pigment dispersion comprising

a polymer, and

a compound of the formula (I) ##STR4## in a colloidal form dispersed in a water-free solvent or

a water-containing solvent, said pigment dispersion ***having an average particle size of less than 0.5 micrometers.***"

(Columns 11-12; Emphasis added; Structure omitted).

Applicants argue that Hall-Goulle fails to disclose the recited dispersed diameter of at least 90 vol% of the pigment particle size. However, as asserted above, Hall-Goulle discloses a composition comprising an average particle size of less than 0.5 micrometers. As indicated in the previous office action, the reported particle size of 0.5 μm is well below the 0.7 μm recited in claims 1 and 13 and, one of ordinary skill in the art will expect that the dispersion disclosed in Ser et. al. has at least 90% of the pigment has a dispersion diameter less than 0.7 μm . Even though these two might be different measurements, there is no reason to think that the particle size of Hall-Goulle et. al. do not fall into the claimed range herein. The prior art products appear to have identical or

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substantially identical properties. As noted above, since the Office does not have the facilities for preparing the claimed materials and comparing them with prior art inventions, the burden is on Applicant to show a novel or unobvious difference between the claimed product and the product of the prior art. See *In re Best*, 562 F.2d 1252, 195 USPQ 430 (CCPA 1977) and *In re Fitzgerald*, 619 F.2d 67, 205 USPQ 594 (CCPA 1980).

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Roy P. Issac whose telephone number is 571-272-2674. The examiner can normally be reached on 9:00-5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shaojia Anna Jiang can be reached on 571-272-0627. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Roy P. Issac
Patent Examiner
Art Unit 1623
April 28, 2006


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